

18., (New) Process for producing a reinforced formed part with, if appropriate, longitudinal and/or cross sections differing in form and/or size, in which process

an at least partially hollow outer formed part is presented, foam material and blowing agent are introduced into the hollow outer formed part, and

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the blowing agent is activated, so that there is formed in the outer formed part an open-cell or closed-cell metal foam with high resistance to deformation, which at least partially bears against the outer formed part, at least partially fills the inner cavity of the hollow outer formed part and the loading properties and resistance to deformation of which are improved.

19. (New) Process according to Claim 18, characterized in that the fiber orientation of the material of the outer formed part runs essentially parallel to its outer contours.

20. (New) Process according to claim 18 or 19, characterized in that the outer formed part has a plurality of layers of the same or different materials running parallel to one another and lying one on top of the other, the fiber orientation of which is completely or partially parallel to one another.

21. (New) Process according to one of the preceding claims, characterized in that the materials of the outer formed part have one or more - if appropriate jointly formed - layers of cold- or

hot-workable material.

22. (New) Process according to claim 21, characterized in that at least one cold-workable material is selected from the group comprising metal and lightweight metal.

23. (New) Process according to Claim 22, characterized in that the cold-workable material is selected from the group consisting of steel, aluminum, magnesium, titanium and alloys of the same.

24. (New) Process according to one of the preceding claims, characterized in that it has fiber-reinforced materials in the outer formed part.

25. (New) Process according to claim 24, characterized in that the hollow outer formed part at least partially consists of metal and is produced by an internal high-pressure forming process.

26. (New) Process according to claim 25, characterized in that the hollow outer formed part at least partially consists of a polymer, the outer formed part being created by forming of its at least one-layered material by a forming process known per se, such as casting, thermoforming, blow molding, or else internal high-pressure forming, and is subsequently filled with a metal-

foam material.

B | 27. (New) Process according to one of Claims 25 or 26,
characterized in that, after expanding the metal foam into the
outer formed part, the metal foam located in the outer formed
part and the hollow outer formed part are jointly formed.

28. (New) Formed part, produced according to at least one of
the processes of claims 18-27.
